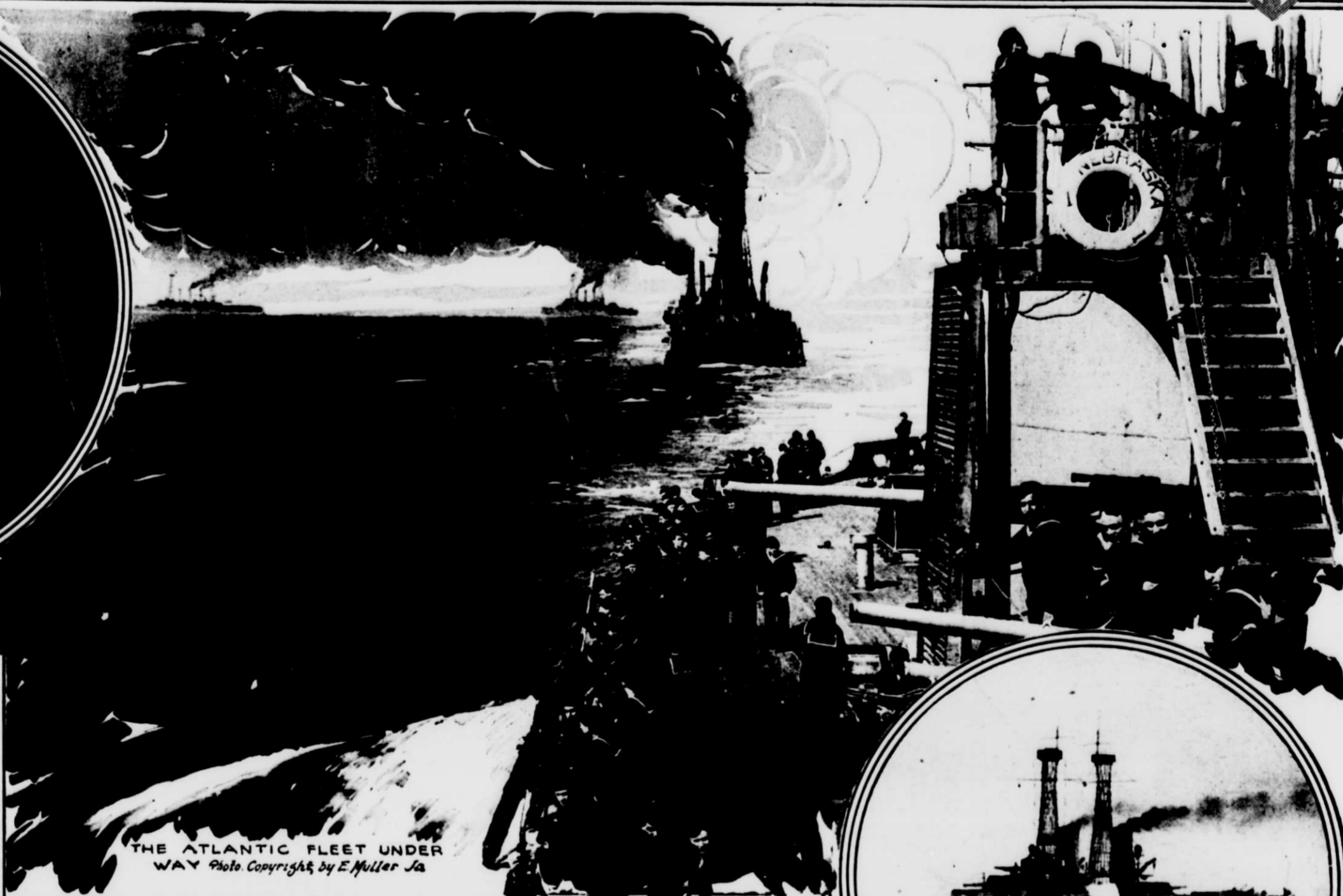


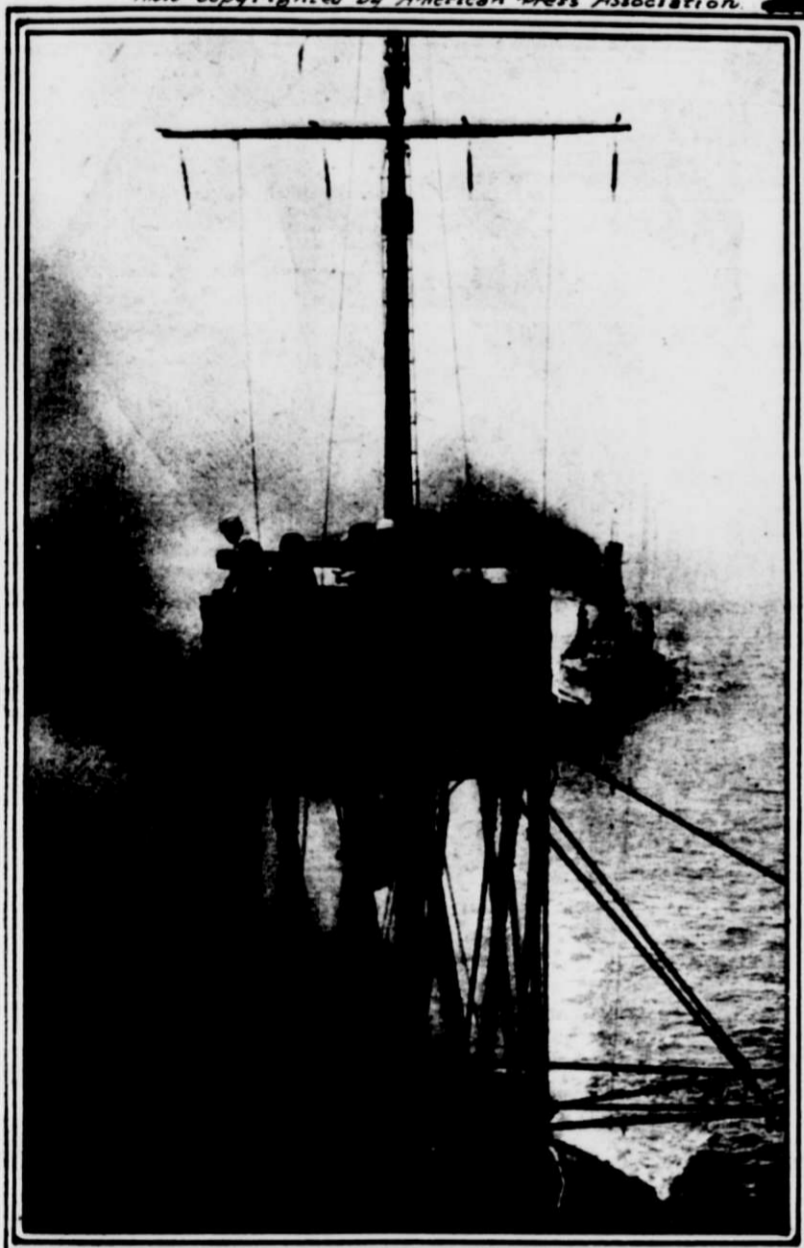
NAVAL LESSONS OF THE WAR IN EUROPE



REAR ADMIRAL CLIFFORD J. BOUSH
Commander of Second Division
Photo Copyrighted by American Press Association



THE ATLANTIC FLEET UNDER
WAY Photo Copyrighted by E. Muller Jr.



MAINMAST "SPOTTER STATION"
OF THE "WYOMING"
Photo Copyrighted by E. Muller Jr.

Continued from Eighth Page.

cruisers and destroyers pierced the veil and kept Vice-Admiral Beatty fully advised so that the foe could not swing away and widen the distance between him and his pursuers. These facts should give us a deeper interest in our own torpedo flotilla which will figure here in the forthcoming review. While we are better off in the matter of destroyers than we are in scout cruisers, still our flotilla of these craft is declared to be below tactical requirements. For every dreadnought there should be four of these boats for scouting and screening work in order that the foe can be discovered and hung to despite his best endeavors to evade pursuit or to effect a change of position which will give him the advantage of light and wind in battle.

As Vice-Admiral Sir David Beatty said, pursuit of the Germans was halted when submarines were discovered, and this brings us to the meaning of this new order of fighting craft, which will figure in greater number at the approaching review than during the naval parade here in October of 1912.

The better part of the Atlantic seaboard offers a particularly inviting field for defence by means of submarines, because the sandy bottom dips seaward gradually, at times the 100 foot line being miles seaward.

Admitting, therefore, the fighting value of the submarine and recognizing what it can do when it succeeds in planting its torpedoes against the underbody of an armored craft, the question is naturally asked: "What has been done in the American navy to draw the sting of this sort of attack?"

A few years ago we made a part way experimental installation on the armored cruiser North Carolina of a self-salving system, invented by a civilian, William Wallace Wetherston, in which compressed air could be turned into a damaged compart-

ment immediately so that the invading sea could be halted and prevented from rising higher than the upper edge of the wound. So successful were the tests that a more extensive equipment was placed in the dreadnought Utah, and that fact will add particular interest to that ship during the review.

As she is to-day, the Utah is more nearly unsinkable than any other battle craft in the service, and five of the dreadnoughts now being built will have a still more extensive installation of this sort. Happily all of our dreadnoughts can be safeguarded in this fashion at moderate expense.

The march of marine engineering is a restless one. A few years ago when it was proposed to drive the fleet collier Jupiter by electricity, using turbines to generate the power through dynamos and not to turn the screws directly, it seemed like a staggering innovation. Nevertheless, thanks to the initiative of one of the big electrical companies, the task was undertaken and the practical results were successful.

The Jupiter will be among the naval auxiliaries assembled for the review. Look at her well because she marks an era in ship propulsion and the stepping stone to a still greater advance. The superdreadnought California of 32,567 tons, which is soon to have her keel laid at the Brooklyn navy yard, will be electrically propelled and all because of what the Jupiter proved to be possible.

Secretary Daniels has said that we are about to turn out 14 inch guns the equal in accuracy, range and hitting power of the biggest rifles afloat in the British navy. Yet naval ordnance experts say that fine as the improved 14 inch gun undoubtedly will be it is not the offensive or battering equal of the 15 inch weapons now on the superdreadnoughts abroad, and it is even rumored that 16 inch guns will appear shortly on the ships nearing completion on the other side of the Atlantic.

But if the question of whether the United States is lagging behind in speed of ships and weight of ordnance be waived, there is another deficiency that cannot be overlooked. That is the total inadequacy of force to man the ships we now have. This was forcibly brought home on the visit of the fleet here three years ago. It is more than ever a problem now that increase in the personnel of the navy has not kept pace with the building of ships.

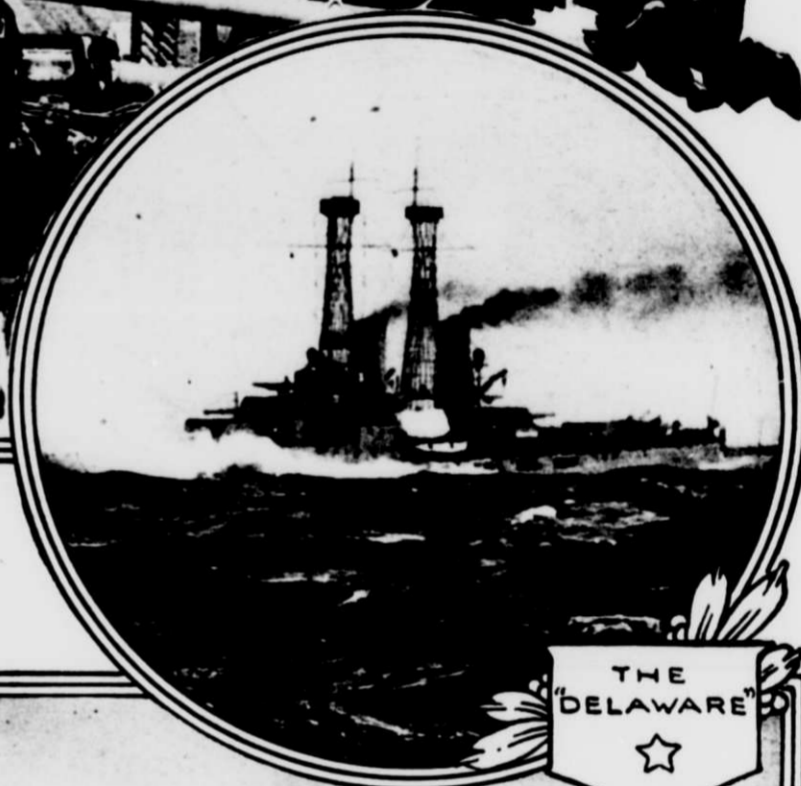
On the former occasion the world was substantially at peace, and the gray-clad battleships seemed all the more formidable because their kind had not then been put to the test of conflict. They seemed fit for any struggle. Yet even then something happened which showed an existing weakness.

Just before the line ended in that seemingly triumphal march one of the reserve battleships signalled that she was unmanageable, and immediately after she halted and drifted out of line as the rest of the division passed her. Right there the veneer of preparedness was broken through. That ship, like all of her mates in the Atlantic reserve fleet, was undermanned, and that shortage led to a breakdown in the engine room.

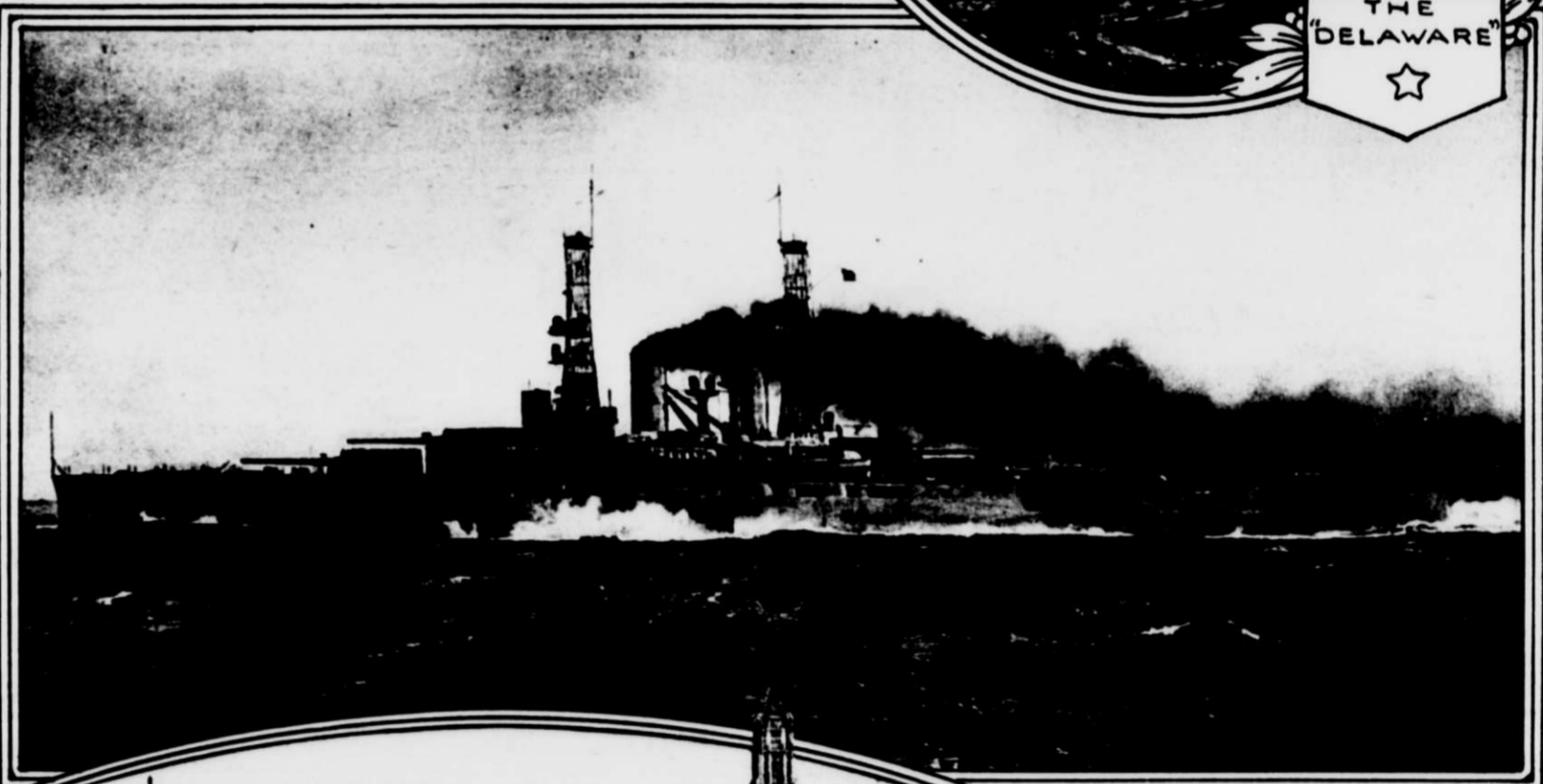
This week, with a still larger force of fighting ships and auxiliaries gathering again in the Hudson for review, impressive as the spectacle will undoubtedly be, students of naval affairs say that the situation as regards the crews is worse than it was three years ago. New ships have been added to the fleet in order to supply them with crews the bulk of the men held aboard the vessels in reserve in 1912 have been drawn away. As the commander in chief of the Atlantic fleet, Admiral Frank F. Fletcher, testified a few months ago, the navy

now is in urgent need of 10,000 men. Josephus Daniels, Secretary of the Navy, has called the navy "the nation's greatest university." But his predecessor, George von L. Meyer, has replied, "A battleship is not a school; it is a machine shop and must be manned by men trained to operate it."

And when Mr. Meyer said manned he meant that the ship should have her full complement and that every part of her complex setup should be in prime condition and managed with a maximum of efficiency. Mr. Meyer's statement is borne out by the lessons to be learned from the present war.



THE "DELAWARE"



THE "WYOMING"
Photo Copyrighted by E. Muller Jr.



THE "FLORIDA"
Photo Copyrighted by American Press Association